UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/621,570 | 07/18/2003 | Kenji Kanayama | 056203-0107 | 2113 |

22428 7590 06/03/2005

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

| EXAMINER | |
|---|---|
| DOAN, PHUOC HUU | |
| **ART UNIT** | **PAPER NUMBER** |
| 2687 | |

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/621,570 | KANAYAMA ET AL. | |
| | Examiner | Art Unit | |
| | PHUOC H DOAN | 2687 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 13-16* is/are rejected.

7)☒ Claim(s) *11-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**2.** Claims **1-10, and 13-16** are rejected under 35 U.S.C. 102(b) as being anticipated by **Kumar (US Patent No: 6,640,268).**

**As to claim 1**, Kumar discloses a communication system comprising: a master and a slave that can communicate with each other (col. 3, lines 40-56), said master "**host computer system 100**" including a first communication section for transmitting a start request signal to said slave "**peripheral device 102**" (col. 5, lines 5-34), said slave including a second communication section for receiving the start request signal transmitted by said master (col. 6, lines 10-50), wherein said slave can take any of a start state in which said slave can communicate with said master (col. 12, lines 60-67), a communication control state in which at least said slave can receive the start request signal transmitted by said master and makes a transition to the start state upon reception of the start request signal (col. 13, lines 1-16), or a standby state in which power is less consumed than in the start state or the communication control state (col. 12, lines 1-31), and wherein said slave further comprises a state control section for repeatedly operating so that said slave in the standby state is switched to the communication control state at a predetermined timing and is switched to the standby

state when the communication control state continues for a predetermined time period without receiving the start request signal (col. 12, lines 32-67, and col. 13, lines 15-43).

**As to claim 2**, Kumar further discloses the communication system as claimed in claim 1, wherein communications between said master and said slave are radio communications (col. 3, lines 30-40), the first communication section transmits the start request signal by radio communications, and the second communication section receives the start request signal by radio communications (col. 4, lines 29-47, and col. 6, lines 10-35).

**As to claim 3**, Kumar further discloses the communication system as claimed in claim 1, comprising a plurality of said slaves (col. 11, lines 35-48), wherein said master switches assignment time periods of communications with said slaves in order, thereby communicating with said slaves (col. 12, lines 41-61), and when said master transmits the start request signal (col. 13, lines 16-25), said master transmits the start request signal in the assignment time period of communications with the slave to which the start request signal is transmitted (col. 13, lines 16-44).

**As to claim 4**, this claim is rejected for the same reason as set forth in claim 3.

**As to claim 5**, Kumar further discloses the communication system as claimed in claim 1, comprising a plurality of said slaves (col. 11, lines 35-48), wherein said master switches assignment time periods of communications with said slaves in order, thereby communicating with said slaves (col. 12, lines 41-61), and when said master transmits the start request signal (col. 13, lines 16-25), said master transmits the start request

signal using a time period between the assignment time periods of communications with said slaves (col. 13, lines 1-44).

**As to claim 6**, this claim is rejected for the same reason as set forth in claim 5.

**As to claim 7**, Kumar further discloses the communication system as claimed in claim 5, wherein the start request signal is a signal that can cause two or more slaves to make a transition from the communication control state to the start state (col. 12, lines 40-67).

**As to claim 8**, this claim is rejected for the same reason as set forth in claim 7.

**As to claim 9**, Kumar further discloses the communication system as claimed in claim 5, wherein the time period between the state control section of each slave switching said slave to the communication control state and then switching said slave to the standby state is a time period that can include one of assignment time periods to said slaves in said master and the time required for said master to transmit the start request signal (col. 12, lines 8-67).

**As to claim 10**, this claim is rejected for the same reason as set forth in claim 9.

**As to claim 13**, Kumar discloses a communication apparatus as a slave that can communicate with a master (col. 4, lines 29-57), comprising: a communication section (Fig. 1, items 122, 128), when the master "**host computer system 100**" transmits a start request signal to said communication apparatus (col. 5, lines 5-34), for receiving the start request signal (col. 6, lines 10-50), wherein said communication apparatus can take any of a start state in which said communication apparatus can communicate with the master (col. 12, lines 60-67), a communication control state in which at least said

communication apparatus can receive the start request signal transmitted by the master and makes a transition to the start state upon reception of the start request signal (col. 13, lines 1-16), or a standby state in which power is less consumed than in the start state or the communication control state (col. 12, lines 1-31), and wherein said communication apparatus further comprises a state control section for repeatedly operating so that said communication apparatus in the standby state is switched to the communication control state at a predetermined timing and is switched to the standby state when the communication control state continues for a predetermined time period without receiving the start request signal (col. 12, lines 32-67, and col. 13, lines 15-43).

**As to claim 14**, this claim is rejected for the same reason as set forth in claim 2.

**As to claim 15**, Kumar discloses a communication control method in a slave that can communicate with a master (col. 4, lines 29-57), the method comprising: making the slave a start state in which the slave can communicate with the master (col. 12, lines 60-67); making the slave a communication control state in which at least the slave can receive a start request signal transmitted by the master and makes a transition to the start state upon reception of the start request signal (col. 13, lines 1-16); making the slave a standby state in which power is less consumed than in the start state or the communication control state (col. 12, lines 1-61; and performing repeatedly an operation of switching from the standby state to the communication control state at a predetermined timing and switching to the standby state when the communication control state continues for a predetermined time period without receiving the start request signal (col. 12, lines 32-67, and col. 13, lines 15-43).

**As to claim 16**, Kumar further discloses the communication control method as claimed in claim 15, wherein the slave receives the start request signal by radio communications (col. 4, lines 29-47, and col. 12, lines 41-61).

***Allowable Subject Matter***

3. Claims **11-12** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**As to claim 11**, the prior art of record do not discloses the communication system as claimed in claim 5, wherein said master transmits the start request signal, said master repeatedly transmits the start request signal for a longer time than the time required until, after the state control section of one of said slaves switches said slave to the communication control state, the state control section switches said slave to the standby state and further to the communication control state.

**As to claim 12**, the prior art of record do not disclose the communication system as claimed in claim 6, wherein said master transmits the start request signal, said master repeatedly transmits the start request signal for a longer time than the time required until, after the state control section of one of said slaves switches said slave to the communication control state, the state control section switches said slave to the standby state and further to the communication control state.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takayanagi (US Pub No: 2003/0148760) discloses "Mobile station having short-range radio function and power consumption reduction method therefor".

Kang (US Pub No: 2002/0082060) discloses "Wireless communication device and controlling method thereof".

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LESTER G KINCAID can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc Doan
05/20/05

5/31/05
LESTER G. KINCAID
PRIMARY EXAMINER